

Claims:

16. An adhesive composition comprising a mixture of about 1 percent to about 50 percent by weight of a chlorinated polymer, about 0.5 percent to about 45 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, about 25 percent to about 90 percent by weight of an alkyl acrylate or methacrylate monomer, and about 0.01 to about 30 percent by weight of a core shell impact modifier.

17. An adhesive composition comprising a mixture of about 2 percent to about 40 percent by weight of a chlorinated elastomer polymer, about 0.5 percent to about 25 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, about 40 percent to about 90 percent by weight of a C<sub>1</sub> to C<sub>5</sub> alkyl acrylate or methacrylate monomer, and about 0.01 to about 30 percent by weight of a core shell impact modifier.

18. An adhesive composition comprising a mixture of about 5 percent to about 30 percent by weight of a chlorinated elastomer polymer, about 0.5 percent to about 20 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 50 percent to about 85 percent by weight of a C<sub>1</sub> to C<sub>5</sub> alkyl acrylate or methacrylate monomer, and about 0.01 to about 30

percent by weight of a core shell impact modifier.

19. The composition of Claims 16, 17 or 18 in admixture with from about 0.01 up to about 25 percent by weight of a C<sub>6</sub> or higher acrylate or methacrylate monomer.

5        20. The composition of Claims 16, 17 or 18 in admixture with from about 0.01 to about 15 percent by weight of a polymerizable organic acid monomer.

21. The composition of Claims 16, 17 or 18 in admixture with a free radical generating catalyst system.

10       22. The composition of Claims 16, 17 or 18 in admixture with a catalyst promoter.

23. The composition of Claims 16, 17 or 18 in admixture with a C<sub>6</sub> or higher acrylate or methacrylate monomer and a polymerizable organic acid monomer.

15       24. The composition of Claims 16, 17 or 18 in admixture with a C<sub>6</sub> or higher acrylate or methacrylate monomer and a free radical generating catalyst system.

20       25. The composition of Claims 16, 17 or 18 in admixture with a free radical generating catalyst system and a catalyst promoter.

26. The adhesive composition of Claim 16 wherein the chlorinated polymer comprises a polyvinyl chloride.

27. The adhesive composition of Claim 16 wherein the chlorinated polymer comprises a polyvinyl chloride or a blend

of a polyvinyl chloride and a nitrile elastomer.

28. The composition of Claims 16, 17 or 18 wherein the chlorinated polymer is selected from the group consisting of polychloroprene, chlorinated polyethylene, chlorinated rubber, epichlorohydrin polymers, and non-sulfur containing polymers containing 20 to 55 percent chlorine and mixtures thereof.

29. The composition of Claims 16, 17, or 18 wherein the core shell impact modifier is selected from MBS polymer impact modifiers, ABS polymer impact modifiers and MABS polymer impact modifiers.

30. The composition of Claim 16, 17, or 18 wherein the core shell impact modifier comprises from about 5 to about 20 percent of the adhesive composition by weight.

31. The composition of Claim 16, 17, or 18 wherein the core shell impact modifier comprises from about 5 to about 10% of the adhesive composition by weight.

32. The composition of Claims 16, 17 or 18 wherein tensile elongation of the adhesive composition after curing for about 24 hours at ambient temperature followed by an additional curing of the composition for one hour at 82°C is at least about 50 percent of tensile elongation of the adhesive composition after the initial 24 hour curing alone.

33. The composition of Claim 16, 17 or 18 wherein

tensile elongation of the adhesive composition after curing for about 24 hours at ambient temperature is at least about 100 percent and wherein the tensile elongation is at least about 50 percent following additional curing for one hour at 82°C.

34. The composition of Claim 16, 17 or 18 wherein tensile elongation of the adhesive composition after curing for about 24 hours at ambient temperature is at least about 150 percent and wherein the tensile elongation is at least about 70 percent following additional curing for one hour at 82°C.

35. The composition of Claim 16, 17 or 18 wherein tensile elongation of the adhesive composition after curing for about 24 hours at ambient temperature is from about 100 percent to about 200 percent and wherein the tensile elongation is from about 50 percent to about 150 percent following additional curing for one hour at 82°C.

36. The composition of Claim 16, 17 or 18 wherein tensile elongation of the adhesive composition after curing for about 24 hours at ambient temperature is about 150 percent to about 250 percent and wherein the tensile elongation is about 75 percent to about 200 percent following additional curing for one hour at 82°C.

37. An adhesive composition comprising a mixture of

about 1 percent to about 50 percent by weight of a non-sulfur containing chlorinated polymer, about 0.5 percent to about 45 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 25  
5 percent to about 90 percent by weight of an alkyl acrylate or methacrylate monomer, wherein tensile elongation of the adhesive composition after curing for about 24 hours at ambient temperature followed by an additional curing of the composition for one hour at 82°C is at least about 50 percent  
10 of tensile elongation of the adhesive composition after the initial 24 hour curing alone.

38. An adhesive composition comprising a mixture of about 1 percent to about 50 percent by weight of a non-sulfur containing chlorinated polymer, about 0.5 percent to about 45  
15 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 25 percent to about 90 percent by weight of an alkyl acrylate or methacrylate monomer, wherein tensile elongation of the adhesive composition after curing for about 24 hours at  
20 ambient temperature is at least about 100 percent and wherein the tensile elongation is at least about 50 percent following additional curing for one hour at 82°C.

39. An adhesive composition comprising a mixture of about 1 percent to about 50 percent by weight of a non-sulfur

P-1086A

containing chlorinated polymer, about 0.5 percent to about 45 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 25 percent to about 90 percent by weight of an alkyl acrylate or methacrylate monomer, wherein tensile elongation of the adhesive composition after curing for about 24 hours at ambient temperature is at least about 150 percent and wherein the tensile elongation is at least about 70 percent following additional curing for one hour at 82°C.

40. An adhesive composition comprising a mixture of about 1 percent to about 50 percent by weight of a non-sulfur containing chlorinated polymer, about 0.5 percent to about 45 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 25 percent to about 90 percent by weight of an alkyl acrylate or methacrylate monomer, wherein tensile elongation of the adhesive composition after curing for about 24 hours at ambient temperature is from about 100 percent to about 200 percent and wherein the tensile elongation is from about 50 percent to about 150 percent following additional curing for one hour at 82°C.

41. An adhesive composition comprising a mixture of about 1 percent to about 50 percent by weight of a non-sulfur containing chlorinated polymer, about 0.5 percent to about 45

percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 25 percent to about 90 percent by weight of an alkyl acrylate or methacrylate monomer, wherein tensile elongation of the adhesive composition after curing for about 24 hours at ambient temperature is about 150 percent to about 250 percent and wherein the tensile elongation is about 75 percent to about 200 percent following additional curing for one hour at 82°C.

42. The adhesive composition of Claim 37 comprising a mixture of about 2 percent to about 40 percent by weight of a non-sulfur containing chlorinated elastomer polymer, about 0.5 percent to about 25 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 40 percent to about 90 percent by weight of a C<sub>1</sub> to C<sub>5</sub> alkyl acrylate or methacrylate monomer.

43. The adhesive composition of Claim 38 comprising a mixture of about 2 percent to about 40 percent by weight of a non-sulfur containing chlorinated elastomer polymer, about 0.5 percent to about 25 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 40 percent to about 90 percent by

weight of a C<sub>1</sub> to C<sub>5</sub> alkyl acrylate or methacrylate monomer.

44. The adhesive composition of Claim 39 comprising a mixture of about 2 percent to about 40 percent by weight of a non-sulfur containing chlorinated elastomer polymer, about 0.5 percent to about 25 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 40 percent to about 90 percent by weight of a C<sub>1</sub> to C<sub>5</sub> alkyl acrylate or methacrylate monomer.

45. The adhesive composition of Claim 40 comprising a mixture of about 2 percent to about 40 percent by weight of a non-sulfur containing chlorinated elastomer polymer, about 0.5 percent to about 25 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 40 percent to about 90 percent by weight of a C<sub>1</sub> to C<sub>5</sub> alkyl acrylate or methacrylate monomer.

46. The adhesive composition of Claim 41 comprising a mixture of about 2 percent to about 40 percent by weight of a non-sulfur containing chlorinated elastomer polymer, about 0.5 percent to about 25 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 40 percent to about 90 percent by



weight of a C<sub>1</sub> to C<sub>5</sub> alkyl acrylate or methacrylate monomer.

47. The adhesive composition of Claim 37 comprising a mixture of about 5 percent to about 30 percent by weight of a non-sulfur containing chlorinated elastomer polymer, about 0.5 percent to about 20 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 50 percent to about 85 percent by weight of a C<sub>1</sub> to C<sub>5</sub> alkyl acrylate or methacrylate monomer.

48. The adhesive composition of Claim 38 comprising a mixture of about 5 percent to about 30 percent by weight of a non-sulfur containing chlorinated elastomer polymer, about 0.5 percent to about 20 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 50 percent to about 85 percent by weight of a C<sub>1</sub> to C<sub>5</sub> alkyl acrylate or methacrylate monomer.

49. The adhesive composition of Claim 39 comprising a mixture of about 5 percent to about 30 percent by weight of a non-sulfur containing chlorinated elastomer polymer, about 0.5 percent to about 20 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 50 percent to about 85 percent by weight of a C<sub>1</sub> to C<sub>5</sub> alkyl acrylate or methacrylate monomer.

50. The adhesive composition of Claim 40 comprising a mixture of about 5 percent to about 30 percent by weight of

P-1086A

a non-sulfur containing chlorinated elastomer polymer, about 0.5 percent to about 20 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 50 percent to about 85 percent by weight of a C<sub>1</sub> to C<sub>5</sub> alkyl acrylate or methacrylate monomer.

51. The adhesive composition of Claim 41 comprising a mixture of about 5 percent to about 30 percent by weight of a non-sulfur containing chlorinated elastomer polymer, about 0.5 percent to about 20 percent by weight of a nitrile elastomer, a thermoplastic acrylonitrile copolymer or mixtures thereof, and about 50 percent to about 85 percent by weight of a C<sub>1</sub> to C<sub>5</sub> alkyl acrylate or methacrylate monomer.